

Attorney Docket No.: 403047-A-01-US (Orbach)
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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AUG 26 2009

In re Patent Application of:
Julian James Orbach

Application No.: 10/810,459

Confirmation No.: 9320

Filed: 03/27/2004

Art Unit: 2614

For: Method And Apparatus For Determining The
Presence Of The User By A
Telecommunication Terminal

Examiner: Nguyen, Khai N.

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This brief is filed within 1 month of the Notice of Panel Decision
from Pre-Appeal Brief Review received in this case on 07/29/2009.

The fees required under § 41.20(b)(2) are dealt with in the
accompanying FEE TRANSMITTAL.

This brief contains items under the following headings as required
by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

- | | |
|-------|---|
| I. | Real Party In Interest |
| II. | Related Appeals and Interferences |
| III. | Status of Claims |
| IV. | Status of Amendments |
| V. | Summary of Claimed Subject Matter |
| VI. | Grounds of Rejection to be Reviewed on Appeal |
| VII. | Argument |
| VIII. | Claims |

I hereby certify that this correspondence is being facsimile transmitted to Commissioner, at fax No. 571-273-8300,
on

08/26/2009
Date Being Faxed

John C. Moran
Signature

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IX. Evidence
X. Related Proceedings

Appendix A Claims
Appendix B Evidence
Appendix A Related Proceedings

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I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Avaya Inc. per Reassignment on Reel/Frame 021156/0082
recorded 06/26/2008.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 19 claims pending in application (claims 1-5 and 9-22).

B. Current Status of Claims

Claims canceled: 18 (claims 6-8, 23-37)

Claims objected to: none

Claims withdrawn from consideration but not canceled: none

Claims pending: 19 (claims 1-5 and 9-22)

Claims allowed: none

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Claims rejected: 19 (claims 1-5 and 9-22)

C. Claims On Appeal

The claims on appeal are claims 1-5 and 9-22.

IV. STATUS OF AMENDMENTS

The Appellant has not amended the claims.

Accordingly, the claims enclosed herein as Appendix A incorporate the amendments indicated in the paper filed.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 is directed to a method for detecting the presence of a user at a telecommunication terminal (Figure 2) by testing acoustic paths communicating audio information from and back to the telecommunication terminal (blocks 501-503 of Figure 4) and determining (decision block 403 of Figure 4) the presence of the user based on the changes in acoustic paths.

Claim 9 is directed to an apparatus (blocks 201-206, 208-211, and 216-229 of Figure 2) for detecting presence of a user at a telecommunication terminal. The apparatus uses a transmitter (blocks 208, 209, and 211 of Figure 2) for transmitting audio information, and a receiver (blocks 203, 204, and 206 of Figure 2) for receiving the transmitted audio information via acoustic paths (paths 207). The apparatus has a model of the acoustic paths (block 224 of Figure 2) for using the audio information before transmission and for producing an audio output. The apparatus uses a comparator (block 228 of Figure 2) for determining a difference between the audio output and received audio information. The apparatus uses a modifier (block 226 of Figure 2) for

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iteratively generating modifications for the model of the acoustic paths in response to the difference and audio information before transmission. Finally, the apparatus uses a controller (controller 201 of Figure 2) responsive to the modifications for detecting the presence or non-presence of the user at the telecommunication terminal.

Claim 13 is directed to an apparatus (blocks 201 and 202 of Figure 2) for detecting presence of a user at a telecommunication terminal. An echo canceller (echo canceller 202 of Figure 2) of the apparatus is used for canceling echoes caused by acoustic paths to audio information from and back to the echo canceller. A controller (controller 201 of Figure 2) of the apparatus is used to determine the presence and non-presence of the user at the telecommunication terminal in response to changes in the echo canceller.

Claim 18 is directed to a method for determining the presence of a user at a telecommunication terminal (Figure 2) by detecting (decision block 402 of Figure 4) echoes caused by acoustic paths to audio information from an echo detector (blocks 202-211 of Figure 2) and determining in response to the changes in the echo detector by a controller (controller 201 of Figure 2) the presence or non-presence of the user at the telecommunication terminal.

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claims 1-5 and 9-12 stand rejected under 35 U.S.C. §102(e) as unpatentable over U.S. Patent No. 6,542,436 of V. Myllyla (hereafter referred to as Myllyla). Further, claims 13-22 stand rejected under 35 U.S.C. §103(a) as unpatentable over Myllyla in view of U.S. Patent No. 5,680,450 of P.W. Dent, et al. (hereafter referred to as Dent).**

VII. ARGUMENT

The Final Office Action of 11/17/2008 rejected claims 1-5 and 9-12 under 35 U.S.C. §102(e) as unpatentable over U.S. Patent No. 6,542,436 of V. Myllyla (hereafter referred to as Myllyla). Further, the Final Office Action rejected claims 13-22 under 35 U.S.C. §103(a) as unpatentable over Myllyla in view of U.S. Patent No. 5,680,450 of P.W. Dent, et al. (hereafter referred to as Dent).

Claims 1-5 stand rejected under 35 U.S.C. § 102 (e).

Appellant respectfully submits that Myllyla does not disclose detecting the presence of the user rather discloses a system for determining if the mobile telephone is to be used in the hands-free mode (mobile telephone away from the ear of the user) or handset mode (mobile telephone next to the ear of the user). Myllyla clearly describes this type of operation in Column 1, lines 20-31, and Column 3, lines 9-15. Myllyla does not disclose or suggest detecting the presence of the user since Myllyla assumes that the user is present and is only trying to determine the location of the mobile telephone to the user's head.

The Final Office Action of 11/17/2008, on Page 2, made the following statement:

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testing acoustic paths communicating audio information from them back to the telecommunication terminal (Fig. 1, one AM getting, 2 RECEIVING, A Path, Be Path, they 2, Mobile Telephone/Cellular Telephone/personal Communicator, col. 2 lines 66-67, and col. 3. lines 1-4, generates a measurement signal from and back to the detection system via acoustic paths); and determining the presence of the user based on changes in the acoustic paths (Figs. 1-2, col. 3 lines 4-8, i.e., the altered measurement signal is compared to a predetermined threshold value for determining the presence of the user).

Although the Final Office Action states that "the altered measurement signal is compared to a predetermined threshold value for determining the presence of the user", this is not true. Myllyla clearly states in Column 1, lines 20-31 and Column 3, lines 9-15 that the mobile telephone is determining if the mobile telephone is to be used in the hands-free mode (mobile telephone away from the ear of the user) or handset mode (mobile telephone next to the ear of the user). The mobile telephone is not determining the presence of the user rather if the telephone is next to the user's ear.

Appellant respectfully submits that claim 1 is patentable under 35 U.S.C. §102(e) for these reasons.

Dependent claims 4-5 are directly or indirectly dependent on claim 1 and are patentable for at least the same reasons as independent claim 1 under 35 U.S.C. §102(e).

Claims 9-12 stand rejected under 35 U.S.C. § 102(e).

Appellant respectfully submits that claim 9-12 are patentable under 35 U.S.C. §102(e) for same reasons as claims 1-5.

Claims 13-17 stand rejected under 35 U.S.C. §103(a) as unpatentable over Myllyla in view of Dent.

Claim 13 recites the following:

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An apparatus for detecting presence of a user at a telecommunication terminal, comprising:
an echo canceller for canceling echoes caused by acoustic paths to audio information from and back to the echo canceller;
and
a controller responsive to changes in the echo canceller for determining the presence and non-presence of the user at the telecommunication terminal.

As previously shown in the earlier paragraphs with respect to claim 1, Myllyla does not disclose determining the presence or non-presence of the user but rather discloses determining whether the mobile telephone is being held at the user's ear or not. Furthermore, Myllyla does not disclose or suggest an echo canceller or a controller responsive to changes in the echo canceller for determining the presence or non-presence of a user. The Final Office Action relies on Dent to teach an echo canceller but does not cite any text in Dent or Myllyla that disclose the detection of the presence or non-presence of a user by a controller based on changes in an echo canceller as is clearly recited in claim 13. Rather, the Final Office Action relies on the fact that the DSP of Myllyla could implement an echo canceller and that echo cancellers are inherent in cellular telephones. Whereas, this statement is true it does not disclose or suggest the operation of a controller determining presence or non-presence in response to changes in the echo canceller as recited in claim 13. Dent does disclose an echo canceller; but Dent does not disclose determining the presence or non-presence of the user using that echo canceller. Dent only discloses using the echo canceller in a conventional manner.

Consider now how the DSP of Myllyla is utilized to determine if the mobile telephone is being held to the ear of the user. The DSP implements the functions of Figure 4 which are used to make the determination concerning whether or not the mobile telephone being held to the ear of the user. In Column 5, lines 9-21, Myllyla clearly discloses that the speaker 10 is driven by a measurement signal generator 14 which

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would be implemented by the DSP to generate impulses. When the impulses are received back by microphone 12, they are processed by two adaptive filters, 22 and 24, which perform impulse response estimations. Filter 22 is designed to monitor rapid changes of the telephone being near the ear; whereas filter 24 is utilized to determine the hands-free position where the telephone is away from the ear. The difference between these two filters as determined by difference block 26 determines whether or not the mobile telephone is being held to the ear of the user. (See Column 5, line 22 through Column 6, line 60.) There is no suggestion or disclosure that the DSP of Myllyla in implementing the functions of Figure 4 is implementing an echo canceller as disclosed in Dent. Clearly, the disclosure of Myllyla teaches away from the DSP implementing an echo canceller to make the determination of whether or not the mobile telephone is next to the ear of the user.

Appellant respectfully submits that claim 13 is patentable under 35 U.S.C. §102(e) for these reasons.

Dependent claims 14-17 are directly or indirectly dependent on claim 13 and are patentable for at least the same reasons as independent claim 13 under 35 U.S.C. §103(a).

Claims 18-22 stand rejected under 35 U.S.C. §103(a) as unpatentable over Myllyla in view of Dent.

Appellant respectfully submits that claim 18 is patentable under 35 U.S.C. §102(e) for the same reasons as claim 13.

Dependent claims 19-22 are directly or indirectly dependent on claim 18 and are patentable for at least the same reasons as independent claim 18 under 35 U.S.C. §103(a).

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VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

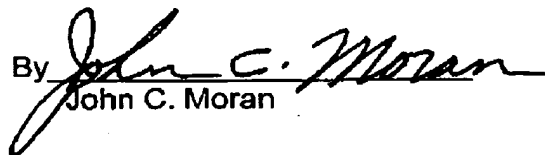
IX. EVIDENCE

No evidence pursuant to § 1.130, 1.131, or 1.132, or entered by or relied upon by the Examiner, is being submitted.

X. RELATED PROCEEDINGS

No related proceedings as indicated in II. above.

Respectfully submitted,

By 
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APPENDIX A - CLAIMS**Claims Involved in the Appeal of Application Serial No. 10/810,459**

- 1 1. (Original) A method for detecting presence of a user at a
2 telecommunication terminal, comprising the steps of:
3 testing acoustic paths communicating audio information from
4 and back to the telecommunication terminal; and
5 determining the presence of the user based on changes in the
6 acoustic paths.
- 1 2. (Original) The method of claim 1 wherein the step of testing
2 comprises the steps of forming a model of the acoustic paths;
3 detecting modifications in the acoustic paths to update the
4 model of the acoustic paths; and
5 the step of determining comprises the step of using the
6 detected modifications to determine changes in the acoustic paths.
- 1 3. (Original) The method of claim 2 wherein the step of
2 detecting comprises the steps of applying audio information transmitted
3 from the telecommunication terminal to the model of the acoustic paths;
4 receiving the transmitted audio information back by the
5 telecommunication terminal via the acoustic paths;
6 determining a difference between an output of the model of
7 acoustic paths from the received audio information; and
8 calculating a correction to the model of the acoustic paths using
9 the difference and transmitted audio information.

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1 4. (Original) The method of claim 1 wherein the audio
2 information is at one of within human hearing, above human hearing and
3 below human hearing.

1 5. (Original) The method of claim 1 wherein the step of
2 determining the presence comprises the steps of developing the model of
3 the acoustic paths with the user presence and not presence at the
4 telecommunication terminal; and
5 calculating a threshold of changes in the model of the acoustic
6 paths that represents the presence or non-presence of the user at the
7 telecommunication terminal.

1 6. (Canceled)

1 7. (Canceled)

1 8. (Canceled)

1 9. (Original) An apparatus for detecting presence of a user at
2 a telecommunication terminal, comprising:
3 a transmitter for transmitting audio information;
4 a receiver for receiving the transmitted audio information via
5 acoustic paths;
6 a model of the acoustic paths for using the audio information
7 before transmission and for producing an audio output;
8 a comparator for determining a difference between the audio
9 output and received audio information;
10 a modifier for iteratively generating modifications for the model
11 of the acoustic paths in responsive to the difference and audio information
12 before transmission; and

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13 a controller responsive to the modifications for detecting the
14 presence or non-presence of the user at the telecommunication terminal.

1 10. (Original) The apparatus of claim 9 wherein the controller
2 further configured for determining modifications when the user is presence
3 and when the user is not presence; and
4 the controller calculating a threshold from the determined
5 modifications indicating the presence or non-presence of the user.

1 11. (Original) The apparatus of claim 9 wherein the audio
2 information is at one of within human hearing, above human hearing and
3 below human hearing.

1 12. (Original) The apparatus of claim 11 wherein the type of
2 the audio information is controlled by the controller.

1 13. (Original) An apparatus for detecting presence of a user at
2 a telecommunication terminal, comprising:
3 an echo canceller for canceling echoes caused by acoustic
4 paths to audio information from and back to the echo canceller; and
5 a controller responsive to changes in the echo canceller for
6 determining the presence and non-presence of the user at the
7 telecommunication terminal.

1 14. (Original) The apparatus of claim 13 wherein the audio
2 information is at one of within human hearing, above human hearing and
3 below human hearing.

1 15. (Original) The apparatus of claim 14 wherein the type of
2 the audio information is controlled by the controller.

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1 16. (Original) The apparatus of claim 13 wherein the echo
2 canceller comprises a model of the acoustic paths;
3 a modifier for generating modifications to the model based on
4 changes to the acoustic paths; and
5 the controller responsive to the generated modifications for
6 determining the presence or non-presence of the user at the
7 telecommunication terminal.

1 17. (Original) The apparatus of claim 16 wherein the modifier
2 responsive to a difference in an output of the model of the acoustic paths
3 to audio information before transmission from the echo canceller and
4 received audio information via the acoustic paths for generating the
5 modification based on the difference and the audio information before
6 transmission.

1 18. (Previously Presented) A method for determining
2 presence of a user at a telecommunication terminal, comprising:
3 detecting echoes caused by acoustic paths to audio information
4 from an echo detector and back to the echo detector by the echo detector;
5 and
6 determining in response to changes in the echo detector by a
7 controller the presence and non-presence of the user at the
8 telecommunication terminal.

1 19. (Previously Presented) The method of claim 18 wherein
2 the audio information is at one of within human hearing, above human
3 hearing and below human hearing.

1 20. (Previously Presented) The method claim 19 wherein the
2 type of the audio information is controlled by the controller.

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1 21. (Previously Presented) The method of claim 18 wherein
2 the echo detector comprises a model of the acoustic paths;
3 generating modifications to the model based on changes to the
4 acoustic paths by a modifier; and
5 determining in response to the generated modifications by the
6 controller the presence or non-presence of the user at the
7 telecommunication terminal.

1 22. (Previously Presented) The method of claim 21 wherein
2 the modifier responsive to a difference in an output of the model of the
3 acoustic paths to audio information before transmission from the echo
4 detector and received audio information via the acoustic paths for
5 generating the modification based on the difference and the audio
6 information before transmission.

1 23. (Canceled)

1 24. (Canceled)

1 25. (Canceled)

1 26. (Canceled)

1 27. (Canceled)

1 28. (Canceled)

1 29. (Canceled)

1 30. (Canceled)

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1 31. (Canceled)

1 32. (Canceled)

1 33. (Canceled)

1 34. (Canceled)

1 35. (Canceled)

1 36. (Canceled)

1 37. (Canceled)

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APPENDIX B - EVIDENCE

None.

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APPENDIX C - RELATED PROCEEDINGS

None.